

PATENT
450101-03685**REMARKS/ARGUMENTS**

Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of the amendments and remarks herewith, which place the application into condition for allowance. The present amendment is being made to facilitate prosecution of the application.

I. STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 1-9 are currently pending. Claims 1, 8 and 9 are independent. Claims 1-6 and 8-9 are hereby amended. No new matter has been introduced. Support for this amendment is provided throughout the Specification as originally filed.

Changes to the claims are not made for the purpose of patentability within the meaning of 35 U.S.C. §101, §102, §103, or §112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicants are entitled.

II. INFORMATION DISCLOSURE STATEMENT (IDS)

Enclosed herewith is a copy the International Search Report that was inadvertently left out of the IDS filed 01/25/2001. A duplicate copy of the Form PTO-1449 also is included herewith. Copies of the publications that were cited in the International Search Report of International Application No. PCT/JP01/01127 were included with the IDS and are not again included herewith.

Applicants respectfully request consideration of the IDS filed 01/25/2001.

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III. OBJECTIONS TO THE SPECIFICATION

The title of the application has been amended as shown herein above to overcome the objection. Applicants respectfully request withdrawal of this objection to the specification.

IV. CLAIMS OBJECTIONS

The claims are herein amended to overcome the objections. Applicants respectfully request withdrawal of the objections to the claims.

V. REJECTIONS UNDER 35 U.S.C. §102

Claims 1 and 7-8 were rejected under 35 U.S.C. §102(e) as allegedly anticipated by U.S. Patent No. 6,185,528 to Fissore et al. (hereinafter, merely Fissore). Applicants respectfully traverse this rejection.

Independent, as amended claim 1 recites, *inter alia*:

"A speech recognition apparatus . . . comprising:
extraction means for extracting characteristic values of said speech, the speech comprising a plurality of words;

. . .
selection means for selecting one or more first words from the plurality of words to be processed by speech recognition processing, based on a first measure calculated using said characteristic values, and for selecting one or more second words from the plurality of words based on a second measure different from said first measure . . ." (emphasis added).

As understood by the Applicants, Fissore discloses, in relevant part, a method of speech recognition having two recognition steps that operate sequentially on a same utterance to be recognized. The first (neural) step analyzes the entire vocabulary word list. The second step (Markov) step analyzes a partial vocabulary word list, represented by the list of hypotheses provided as the neural step result. Thus, in Fissore, words from the speech are recognized by

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selection of a first word from a first vocabulary list and a second word from a second vocabulary list. That is, the selected first and second words come from the vocabulary lists.

In contrast, claim 1 recites, "the speech comprising a plurality of words . . . selection means for selecting one or more first words from the plurality of words to be processed by speech recognition processing, based on a first measure calculated using said characteristic values, and for selecting one or more second words from the plurality of words."

Thus, in the present invention, the speech that is to be recognized comprises a plurality of words. The first and second words are selected from the plurality of words that are part of the speech to be recognized. The first and second words come from the speech to be recognized. It is those first and second words from the speech that are analyzed against the databases.

This is distinguished from Fissore where the speech is recognized by getting first and second words selected from vocabularies of words then applying a scoring mechanism for determining the best fit.

The present invention has the advantage that from a set of words in received speech subjected to processing for speech recognition, one or more first words of the received speech are selected on the basis of a first measure calculated using characteristic values, while one or more second words from the received speech are selected on the basis of a second measure different from the first measure. The scores are calculated on the so selected first and second words from the received speech. Thus, the risk of deterioration in the accuracy in speech recognition is reduced due to non-selection of the second words based on the first measure.

Claim 1 is patentable over the Fissore reference because that reference does not disclose each and every element of the present invention. In particular, Fissore does not disclose,

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"selecting one or more first words from the plurality of words to be processed by speech recognition processing, based on a first measure calculated using said characteristic values, and for selecting one or more second words from the plurality of words based on a second measure different from said first measure" as recited in claim 1.

For reasons similar or somewhat similar to those described above with regard to independent claim 1, independent claims 8 and 9 are also believed to be patentable.

VI. REJECTIONS UNDER 35 U.S.C. §103(a)

Claims 2-6 and 9 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Fissore in view of various combinations of:

Claim 2 – U.S. Patent No. 5,963,903 to Hon et al. ("Hon");

Claim 3 – Chiang et al. ("On Jointly Learning the Parameters in a Character-Synchronous Integrated Speech and Language Model," 1996);

Claims 4 and 9 - U.S. Patent No. 6,178,401 to Franz et al. ("Franz"); and

Claims 5 and 6 - U.S. Patent No. 5,960,447 to Holt et al. ("Holt").

Neither the Hon, Chiang, Franz nor Holt references teach or suggest the element missing from Fissore as discussed above. Thus, claims 2-6 and 9 are patentable over those references for at least the same reasons as they are patentable over Fissore.

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450101-03685**VII. DEPENDENT CLAIMS**

The other claims are dependent from one of the claims discussed above and are therefore believed patentable for at least the same reasons. Because each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

CONCLUSION

Claims 1-9 are in condition for allowance. In the event the Examiner disagrees with any of statements appearing above with respect to the disclosure in the cited reference, or references, it is respectfully requested that the Examiner specifically indicate those portions of the reference, or references, providing the basis for a contrary view.

Please charge any additional fees that may be needed, and credit any overpayment, to our Deposit Account No. 50-0320.

In view of the foregoing amendments and remarks, it is believed that all of the claims in this application are patentable and Applicants respectfully request early passage to issue of the present application.

Respectfully submitted,

FROMMER LAWRENCE & HAUG LLP
Attorneys for Applicants

By: 

Paul A. Levy
Reg. No. 45,748
(212) 588-0800